

CLAIMS

What is claimed is:

- 1 1. A method comprising:
2 receiving from a requester a request to access an information;
3 if a link to a first remote computer containing the information is down,
4 establishing the link while concurrently returning a plurality of imposter responses
5 until the link is established.
- 1 2. The method of Claim 1 wherein the request is a request to access information
2 about a second remote computer identified by a domain name.
- 1 3. The method of Claim 1 wherein the plurality of imposter responses comprise a
2 plurality of imposter domain names.
- 1 4. The method of Claim 3 wherein returning a plurality of imposter domain
2 names comprises:
3 appending a text string to the domain name to create a current imposter
4 domain name that is one of the plurality of imposter domain names; and
5 instructing the requester that the domain name is an alias for the current
6 imposter domain name.
- 1 5. The method of Claim 4 further comprising:
2 recursively receiving from the requester a plurality of requests to access
3 information about a remote computer identified by one of the plurality of imposter
4 domain names; and
5 if the link remains down, continuing to establish the link, incrementing the
6 current imposter domain name to form a next current imposter domain name of the
7 plurality of imposter domain names, and instructing the requester that the current
8 imposter domain name is an alias for the next current imposter domain name.

1 6. The method of Claim 5 further comprising:
2 detecting that the link is established; and
3 after the link is established,
4 converting the current imposter domain name to the domain name; and
5 informing the requester that the imposter domain name is an alias for
6 the domain name.

1 7. The method of Claim 6 further comprising:
2 receiving from the requester a second request to access the information after
3 the link is established.

1 8. The method of Claim 7 further comprising:
2 after the link is established,
3 forwarding the second request to the first remote computer;
4 receiving a response to the second request; and
5 forwarding the response to the second request to the requester.

1 9. The method of Claim 7 wherein the second request is a request to access
2 information about the second remote computer identified by the domain name.

1 10. The method of Claim 5 further comprising:
2 determining whether a maximum number of recursions has been exceeded,
3 and if so, returning an appropriate error.

1 11. The method of Claim 5 further comprising:
2 determining whether a maximum amount of time has been exceeded, and if so,
3 returning an appropriate error.

1 12. The method of Claim 1 wherein the requester is a domain name system (DNS)
2 resolver.

1 13. The method of Claim 1 wherein the request is initiated by a local application
2 program.

1 14. The method of Claim 1 wherein the request is initiated by a remote application
2 program.

1 15. The method of Claim 1 wherein the first remote computer is a server.

1 16. The method of Claim 1 wherein the link is a network connection.

1 17. The method of Claim 1 wherein the requester is an Internet web browser, the
2 request is an hypertext transfer protocol (HTTP) "get" instruction, and the plurality of
3 imposter responses comprise at least one temporary web page and at least one HTTP
4 "meta refresh" instruction.

1 18. A method comprising:
2 receiving a domain name system (DNS) request initiated by an application
3 program;
4 if no Internet connection has been established, precluding a user from
5 receiving an error message by establishing a dial-up connection to the Internet while
6 concurrently returning a plurality of imposter domain names until the dial-up Internet
7 connection is established.

1 19. The method of Claim 18 wherein returning comprises:
2 forming a current imposter domain name by appending an information to the
3 domain name; and
4 sending a canonical name (CNAME) response stating that the domain name is
5 an alias for the current imposter domain name.

1 20. The method of Claim 19 further comprising:
2 while establishing the dial-up connection, recursively
3 receiving from the application program a request to access information
4 about a remote computer identified by one of the plurality of imposter domain
5 names;

6 forming a next current imposter domain name of the plurality of
7 imposter domain names by modifying a portion of the information of the
8 current imposter domain name; and
9 sending a CNAME response stating that the current imposter domain
10 name is an alias for the next current imposter domain name.

1 21. The method of Claim 20 further comprising:
2 detecting that the dial-up connection is established; and
3 after the dial-up connection is established,
4 converting the current imposter domain name to the domain name; and
5 sending a CNAME response stating that the current imposter domain
6 name is an alias for the domain name.

1 22. The method of Claim 21 further comprising:
2 receiving from the application program a second request to access information
3 about the remote computer identified by the domain name after the dial-up connection
4 is established.

1 23. The method of Claim 22 further comprising:
2 after the dial-up connection is established,
3 forwarding the second request to a server;
4 receiving a response to the second request; and
5 forwarding the response to the application program.

1 24. A network host comprising a processor and a machine readable medium
2 containing instructions which when executed by the processor cause the processor to
3 perform operations comprising:
4 receiving from a requester a request to access an information;
5 if a link to a first remote computer containing the information is down,
6 establishing the link while concurrently returning a plurality of imposter responses
7 until the link is established.

1 25. The network host of Claim 24 wherein the request is a request to access
2 information about a second remote computer identified by a domain name.

1 26. The network host of Claim 24 wherein the plurality of imposter responses
2 comprise a plurality of imposter domain names.

1 27. The network host of Claim 26 wherein returning a plurality of imposter
2 domain names comprises:
3 appending a text string to the domain name to create a current imposter
4 domain name that is one of the plurality of imposter domain names; and
5 instructing the requester that the domain name is an alias for the current
6 imposter domain name.

1 28. The network host of Claim 27 wherein the instructions cause the processor to
2 perform further operations comprising:
3 recursively receiving from the requester a plurality of requests to access
4 information about a remote computer identified by one of the plurality of imposter
5 domain names; and
6 if the link remains down, continuing to establish the link, incrementing the
7 current imposter domain name to form a next current imposter domain name of the
8 plurality of imposter domain names, and instructing the application program that the
9 current imposter domain name is an alias for the next current imposter domain name.

1 29. The network host of Claim 28 wherein the instructions cause the processor to
2 perform further operations comprising:
3 detecting that the link is established; and
4 after the link is established,
5 converting the current imposter domain name to the domain name; and
6 informing the requester that the imposter domain name is an alias for
7 the domain name.

1 30. The network host of Claim 29 wherein the instructions cause the processor to
2 perform further operations comprising:
3 receiving from the requester a second request to access the information after
4 the link is established.

1 31. The network host of Claim 30 wherein the instructions cause the processor to
2 perform further operations comprising:
3 after the link is established,
4 forwarding the second request to the first remote computer;
5 receiving a response to the second request; and
6 forwarding the response to the second request to the requester.

1 32. The network host of Claim 24 wherein the requester is a domain name system
2 (DNS) resolver.

1 33. The network host of Claim 24 wherein the request is initiated by an
2 application program on the host.

1 34. The network host of Claim 33 wherein the application program is an Internet
2 web browser.

1 35. The network host of Claim 24 wherein the request is initiated by an
2 application program on a remote host.

1 36. The network host of Claim 24 wherein the requester is an Internet web
2 browser, the request is an hypertext transfer protocol (HTTP) "get" instruction, and
3 the plurality of imposter responses comprise at least one temporary web page and at
4 least one HTTP "meta refresh" instruction.